

Col. Goethals Talks of How Great Panama Canal Should Be Managed

Culebra, Canal Zone, Panama.
 IN my letter of last Sunday I gave you the first part of my talk with Colonel George W. Goethals, the supreme manager of all things here on the isthmus. I told you what he said about the character of our great canal, its sills, its locks and its dam. I gave you also his story as to how the costs on this job have been managed so as to be cut to a minimum, and gave his prophecy that the canal would be surely opened on time. The talk was held last Sunday afternoon, Colonel Goethals and myself sitting on the porch of his home at Culebra and looking out upon the mountains through which the mighty cut has now been gouged to such a level that ships can pass through it.

The Zone as a Military Reservation.
 Continuing our conversation, I asked the colonel to tell me how the Canal Zone should be managed, and whether there should not be a live American population covering it from end to end of the other.

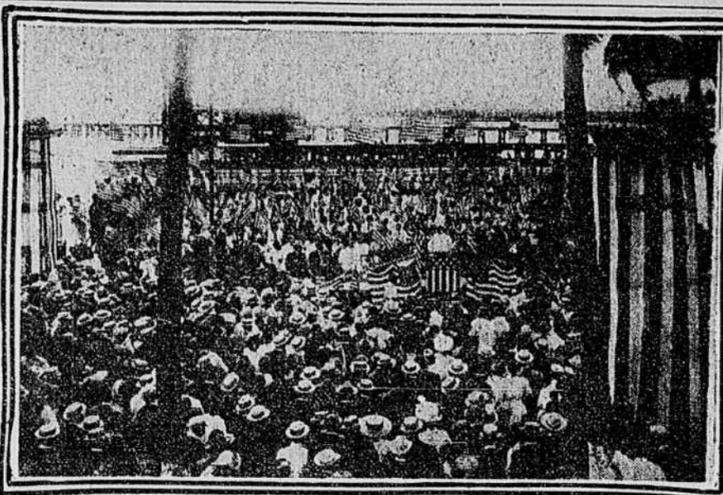
"Not if I have my way," was the emphatic reply. "I would depopulate it as soon as the work is completed. We want nothing on the Zone but the homes of the employees of the canal and the buildings of the military and naval establishments. We shall need dry docks at each of the terminals, and should have the best of loading and unloading facilities. We should have coal stations and fuel oil stations, and if we may be stores and warehouses for supplying the shipping with all things it may need. Further than that, we would be better without settlements. There is at least no need for them now, and if any necessity should develop they will be erected. Until that necessity arises I would like to see the strip kept for what it was originally intended, and that is for the creation, operation and maintenance of the canal."

"Would the zone be a desirable place for American residents?" I asked.
 "I think not. The most productive parts of it are subject to inundation, and what remains is covered with a soil that according to the Department of Agriculture, needs costly treatment to make it productive. There are practically no crops outside those of the tropics that could be expected to pay. During eight or nine months of the year we have a heavy rainfall, which will rot out everything else. Besides, the natives can raise tropical produce cheaper than we can, and that outside of the zone, so that the man on the zone would have the little end of it all around."

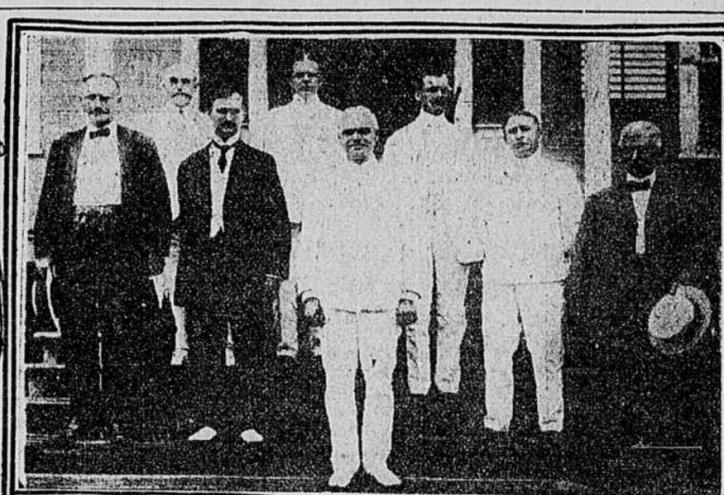
"It must be remembered," Colonel Goethals continued, "that this canal is built mainly because it is a military necessity to the United States. Now, if you would have it of use to us in times of war, we have got to defend and protect it. The defenses must be made not only by seacoast batteries to keep off the ships, but they must be efficient against all landing parties which might enter the country from various points above and below the canal on either coast. For this reason we should have control of all the land surrounding the locks and dams, and from there right out to the boundary. After you take this out there is little land left that is of value."

A Civil Population Would Increase the Cost.
 "Would not a civil population on the zone cause many undesirable complications?"

"Yes, it would involve us in no end of trouble. It would also make the canal cost more. We want the cost of operating to be reduced to the minimum, and to that end we want nothing but the canal. If you have a civil population and develop the zone the government will have to spend great sums for roads, for schools, for police protection, fire protection, sanitation and the other necessary adjuncts of a civilized community. The taxes for such things



A Fourth of July audience at Panama. Canal Zone school children with flags in the rear. The chairman stands in the centre, addressing the crowd. Photograph made at Cristobal.



THE ISTHMIAN CANAL COMMISSION, JANUARY, 1912. Colonel Goethals, the chairman, is in the centre, with Colonel Galliard, Colonel Hodges and Colonel Gorgas on his left, and with Mr. Rousseau, Governor Thatcher, Joseph Bucklin Bishop and Colonel Sibert on his right.

could not be borne by the people, and the money would have to come out of the government. In addition there is the human element which would involve complications not only with the canal authorities, but with the Panamanians."

"Then you do not think the lands of the zone should be open to settlement?"
 "It would be a mistake to open them."

"Then just what should the zone be?"
 "Nothing but a military reservation. It's only homes should be those of the canal employees and the military. If it is made such it will unify the management and reduce the cost of operation. By the terms of the treaty the ten-mile strip was to be devoted to the construction, operation, maintenance, sanitation and protection of the canal. That is the foundation upon which our right to it stands, and it should be kept so."

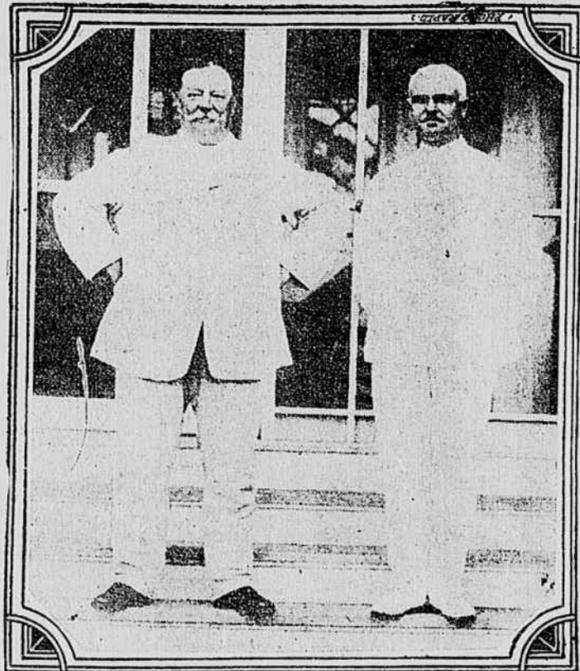
The Fortifications of the Canal.
 "There are many of our people, Colonel Goethals, who think the canal should not be fortified."

"That may be so," was the reply, but I am not one of them. There is no question about the need and desirability of fortifications in my mind. Indeed, we are bound to fortify it by our treaty obligations, if for no other reason. By those treaties we have engaged to maintain the neutrality of the canal, to keep it free for all nations, and to prevent its being attacked. To do that we must have fortifications."

"But that is outside the main question," Colonel Goethals went on. "The chief thing is that we have built the canal as a military necessity, and that in order that it may benefit the United States we must be able to defend it against all possible attacks by sea and land."

"But can it be so defended?"
 "It can be."

"How?"
 "By sea it can be defended by seacoast batteries against bombardment and naval attacks. By land it must be defended by fortifications on land in the vicinity of the locks and dams. There must also be other defenses against landing parties, such as the following:—
 "What do such defenses mean?" I



PRESIDENT TAFT AND COLONEL GOETHALS, the two men who really run the canal, on Colfport steps. Photograph made at Culebra, on Colfport steps.

asked.
 "They mean forts on the islands and on the mainland at the Pacific terminals, and they mean fortifications at the entrances at the Atlantic. They also mean fortifications along the line of the canal at certain points. We have

planned such fortifications and are already building them."

The Cost of Fortifying.
 "But will not these defenses add greatly to the cost of the canal?"

"Nothing like as much as one would suppose," replied Colonel Goethals. "One reason for this is that the character of the modern battleship is such that the number of guns on shore to keep off a fleet can be reduced to a minimum. No naval attack will be attempted on any fortified position until after the supremacy of the rival navy at sea has been settled."

Moreover, the loss of a single battleship would destroy the balance of power and involve the risk of losing a fleet. Now, one of our shots could destroy a ship, and under such conditions the fleets would be very chary of coming near them. The navies realize this danger, and for that reason the Japanese fleet kept pretty well out from Port Arthur. Indeed, as it is now, the navies of the great powers are so evenly balanced that none would risk the destruction of a part of its force at sea by attacking fortifications on land, and assuming that one fleet had been destroyed, the enormous cost of a battleship would keep an enemy from risking it in an unequal fight with land defenses."

"What will our fortifications cost?"
 "They will cost infinitely less than would have been spent had we tried to increase our fleet and depend upon it alone to defend the canal. Every additional battleship of the type now needed costs not less than \$10,000,000 to build, and there is, in addition to that, an ever-increasing maintenance charge. When all these seacoast defenses are completed and those of the land added the expense altogether will not equal that of two battleships, and the fortifications will be far more permanent than the ships. Those who opposed the fortifications claimed that the defense could be accomplished by the navy in case of necessity. In that event we should have had to have a standing fleet for this purpose alone."

The Permanent Force and the Cost.
 "How many men will it take to run the canal after it is completed, Colonel Goethals?"
 "I estimate the number at 2,500, but this does not include the possible sanitation and civil administration of the zone. It does not include the military forces to fortify the canal, and it is based upon the supposition that the zone will be depopulated."

"What will it cost to run the canal?"
 "The total expense of the canal proper, including its maintenance, which belongs to the military establishment, should not exceed \$4,000,000 a year."

"But will the income be as large as that?"

"I think so," said Colonel Goethals. "It will be if we fix the proper tolls. I think we should fix them as high as the traffic will bear, and if we do that we shall have plenty to run the canal and still leave a surplus. As to the shipping which will go through, by estimates made a few years ago by our engineers, there should be at least 7,000,000 tons per annum. Now, we can safely make our toll \$1 per ton. This would give sufficient to pay all the expenses and still leave a surplus."

"Then," Colonel Goethals continued, "in connection with the operation of the canal we retain our present commissary, cold storage and manufacturing plants for the benefit of

shipping; if we sell them fuel, water and make repairs for ships doing a general ship chandlery business, at a fair profit, we ought to have a still greater surplus."

The Canal Will Eventually Pay.
 "But, colonel, in this estimate you do not consider the original investment. The canal will cost in the neighborhood of \$100,000,000. Is Uncle Sam to get no dividends on that amount?"

"I do not think any should be expected," was the reply. "The canal was constructed not as a financial speculation or investment. It was created as a military necessity. The United States had to have it, and our commerce and that of the world should not be taxed for its creation."

"But may it not eventually pay?" I asked. "The Suez Canal pays well. Will ours not equal it?"
 "As to its having a traffic as great

as that of the Suez Canal that is a matter of speculation. But I do not see why it should not. If you will look back you will find that every new waterway that has been opened has developed a commerce far beyond what was anticipated. When the French opened Suez they met with the most bitter opposition from Great Britain and from others of the ship-going nations. They were told that it would be a failure, and the canal was never spoken of except with a sneer. No one could have anticipated the enormous traffic that has actually resulted."

"When the Suez Canal, Marie Canal was decided upon no one had any idea that it would have a traffic of forty or fifty million tons per annum. It will be the same with this canal. Look where it is. It is on the frontier of the only great undeveloped lands of the future. I refer to the vast tracts of South America and Central Amer-

ica. It will be the ocean highway from one part of the country to the other and the ocean highway for Europe. Besides, Asia is just awakening, and the 800,000,000 and more of that continent will eventually be sending their goods to both sides of our hemisphere. As it is now the distances between Asia and Europe favor Suez, but Asia must do a great business with North and South America. Indeed, the possibilities are incalculable."

More About Tolls.
 "Now let us look at the question of tolls," said Colonel Goethals. "Suppose we should eventually have a traffic equal to that of Suez. I have looked over the figures for that year more than for 1909. During that year more than 4,000 vessels passed through it, and their gross tonnage was upward of \$1,000,000. I have not the receipts for that year, but in 1907, when the tonnage was 1,000,000 less, the actual receipts were more than \$20,000,000. A traffic like that would more than pay 4 per cent. interest on the cost of the canal and leave a large surplus above the operating expenses as well. The Suez Canal has in times past charged tolls of \$2 a ton. It has gradually reduced them, until with the beginning of this year the charges will be \$1.25 per ton. They are getting ready to meet our own tolls, and that perhaps because the shipping of the world has been complaining of its excessive rates and suggesting that it may favor Panama."

"How about the rates on passengers?"
 "That is another question. If the toll is levied on the gross tonnage of a ship it should perhaps take in the passengers, as the passengers are a part of the weight. This was the complaint made at Suez by the British when they went through their troop ships. They had to pay for the gross tonnage and then pay so much per man. At one time the rate was \$2 per head, and that on 5,000 troops would be \$10,000."

"This taxing the passengers was one of the subjects of the Constantinople convention, and it resulted in the present basis of measurement of tonnage at Suez. The tolls are now based on the net tonnage, and the passengers are charged for in addition to the net tonnage. If we should charge for passengers in the same way I look for a considerable revenue, not only from the tourist travel, but also from the great immigration which will probably come from Europe to South America in the near future. I believe that this will be a passenger route as well as a freight route."

Should American Ships Go Free?
 "But how about our American vessels," Colonel Goethals? "Would you charge them the same rate as those of foreign nations?"

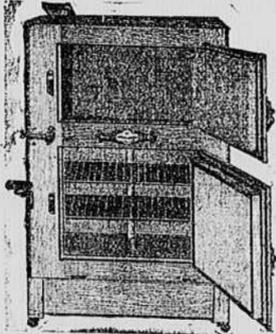
"I think that American ships ought to be favored, but by our treaty with England I don't see how we can discriminate in their favor as long as they are engaged in transcontinental commerce. Under our coastwise laws we can discriminate in favor of our own vessels, since all others are prohibited from engaging in trade between American ports. I would make a lower rate for such vessels."

"And then there is another question that comes up right there," said Colonel Goethals, "and that is whether it is fair to give such rates in justice to the interior of the country. As it is now, the coast cities are the favored ones as to the transcontinental railway haul. They get proportionately lower rates than the towns of the interior. If you cut the rate of tolls this will give those places additional advantage. Another point is that the coastwise shipping will make a rate just as high as the traffic will stand, and any cut we may make in tolls on its behalf will result in benefit to the shipping interests and not to the merchants who ship her to the ultimate consumer."

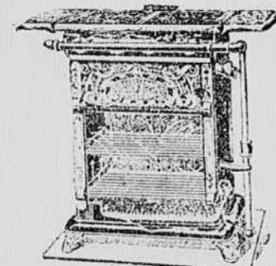
"How about the intercontinental railways? Will the canal seriously affect them?"

"It will to some extent, of course. There are certain commodities that will always be handled by rail and certain heavy, bulky and low-class freight which is sure to go on the ships. The intermediate classes of commodities will be sought after by both railways and ships, and the question as to just what the tolls are will to some extent determine the route." (Copyright, 1912, by Frank G. Carpenter.)

RYAN-SMITH THE BIG STORE



See our cut-away model of the North Star. See for yourself the cork lining, which means such economy of ice.
 Refrigerators as low as \$7.50.



There are Direct Action styles for every need—see our large assortment. Get our prices. Direct Actions are the cheapest in the end.
 Gas Ranges from \$9.50 up.

Cork

Is what makes the North Star the greatest ice-saver of them all. Note this view. The space between the walls is packed solid with real cork—instead of paper and other substitutes generally used—and yet you pay no more for them.

North Star Refrigerators

Gas

Saved is money saved! Look carefully to the gas range you buy. Does it wastefully heat up intervening walls—when the correct way is to apply the heat direct to the baking? Note the arrows in this cut. See how they indicate heat rising direct from the burners into the baking oven. Let us show you the

Direct Action Gas Ranges

...SALE...

Sacrifice of 35c Japan Matting
 A few more rolls of these Desirable Mattings—choice of patterns in blues, tans and reds—offered Extra Special at only, yard... 18c Naturally, full rolls only.





SNOWDRIFT

25 Cents Worth of Snowdrift is Equal to 98 Cents Worth of Butter

For Making Cake

Sold in Hermetically Sealed Cans Only

☞ Snowdrift is a wholesome shortening, useful and economical. It is 100 per cent cooking value, as it is pure fat. Results entirely satisfactory, if you add a little salt.

☞ Fry onions in Snowdrift; strain, and then fry chicken in the same Snowdrift; the chicken will not taste of the onions, because Snowdrift is odorless and tasteless, and cannot absorb odors.

☞ Butter will burn at a temperature of 300 degrees; Lard 340 degrees; Snowdrift not until 400 degrees. Burning fat is useless.

MADE BY
The Southern Cotton Oil Company
 Savannah New Orleans Chicago San Francisco London Liverpool Paris Manchester
 No. 24 Broad St., New York

